InFocus®

large audience projector

LP®790

User's Guide

InFocus®

Copyright © 2001 by InFocus Corporation
Wilsonville, Oregon. All rights reserved.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canada

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Safety Certifications

UL, CUL, TÜV, NOM, IRAM, GOST R

EN 55022 Warning

This is a Class A product. In a domestic environment it may cause radio interference, in which case the user may be required to take adequate measures.

Remote Control Warning

Laser radiation class II product; wavelength 670nm; maximum output 1mW.
Remote control complies with applicable requirements of 21 CFR 1040.10 and 1040.11. Remote control complies with applicable requirements of
EN 60 825-1: 1994 +A11

Declaration of Conformity

Manufacturer: InFocus Corporation
27700B SW Parkway Ave. Wilsonville, Oregon 97070 USA
European Office: Olympia 1, NL-1213 NS Hilversum, The Netherlands

We declare under our sole responsibility that the LP790 projector conforms to the following directives and norms:

EMC Directive 89/336/EEC, Amended by 93/68/EEC
EMC: EN 55022
EN 55024
EN 61000-3-2
EN 61000-3-3
Low Voltage Directive 73/23/EEC, Amended by 93/68/EEC
Safety: EN 60950: 1992 + A1 + A2 + A3 + A4: 1997

October, 2001

Australian Certification C-tick mark

Trademarks

Apple, Macintosh, and PowerBook are trademarks or registered trademarks of Apple Computer, Inc. IBM and PS/2 are trademarks or registered trademarks of International Business Machines, Inc. Microsoft, PowerPoint, and Windows are trademarks or registered trademarks of Microsoft Corporation. InFocus and LP are trademarks or registered trademarks of InFocus Corporation.

TABLE OF CONTENTS

Safety Instructions	**iii**
Introduction	**1**
Image Resolution	1
Compatibility	1
Unpacking the Projector	1
Usage Guidelines	4
If You Need Assistance	4
Warranty	5
Setting up the Projector	**7**
Connecting a Computer	9
Connecting a Computer with a DVI Cable	10
Connecting a Computer with an RS-232 Cable	10
Connecting a Video Player	11
Connecting a Video Player using BNC Cables	12
Connecting External Speakers	12
Connecting the Remote Control Cable	12
Powering up the Projector	13
Turning Off the Projector	16
Using the Projector	**17**
Basic Image Adjustment	17
Adjusting the Projector	17
Using the Remote Control	19
Using the Keypad and Remote Buttons	21
Using the On-Screen Menus	23
Basic Menu	24
Setup menu	26

Maintenance & Troubleshooting **33**
Cleaning the Lens 33
Cleaning the Dust Filter 33
Replacing the Projection Lamp 35
Replacing the Batteries in the Remote Control 37
Using the Security Lock 37
Troubleshooting 38

Appendix **43**
Specifications 43
Accessories 44
Portable and Laptop Activation Chart 46
Using Video Mirroring with a PowerBook Computer 51
Projected Image Size 52

Index **53**

SAFETY INSTRUCTIONS

Please read and follow all safety instructions provided BEFORE using your new projector. Failure to comply with safety instructions may result in fire, electrical shock, or personal injury and may damage or impair protection provided by equipment. Please save all safety instructions.

Safety Definitions:

- **Warning:** Statements identify conditions or practices that could result in personal injury.
- **Caution:** Statements identify conditions or practices that could result in damage to your equipment.

Safety Symbols:

Attention: For information about usage of a feature, please refer to the User's Guide.

Warning: Hot surface. Do not touch.

An arrow pointing to the lamp door on the projector.

Warning: Laser Radiation. Do not stare into the laser beam.

Safety Terms:

- **Warning:** Don't look directly into the lens when the projector is turned on.

•**Warning:** To replace the lamp, turn the projector off and unplug the power cord. To avoid burns, wait 60 minutes before opening the lamp door. Follow all instructions provided in this User's Guide.

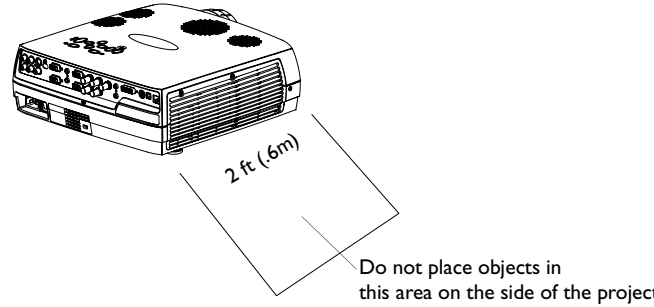
•**Warning:** Please use the power cord provided. Connect the power cord to a receptacle with a protective safety (earth) ground terminal.

•**Warning**: Laser Radiation. Do not stare into the laser beam.

- **Warning:** Refer all service to qualified service personnel. Servicing your own projector will void the warranty. See below for the contact information.
- **Caution:** Don't block ventilation openings.
- **Caution:** Don't set liquids on the projector. Spilled liquids may damage your projector.
- **Caution:** Don't place the projector on a hot surface or in direct sunlight.
- **Caution:** Do not drop the projector. Transport the projector in an InFocus-approved case; see page 45 for a list of cases.

Important Operating Considerations

Do not place the projector on a tablecloth or other soft covering that may block the vents. In the unlikely event of the bulb rupturing, thoroughly clean the area on the side of the projector and discard any edible items placed in that area.



Technical Support

If you need assistance, call InFocus Technical Support directly at **1-800-799-9911**. Support is free between 6 a.m. and 6 p.m. PST, Monday through Friday. Support is available in North America after hours and weekends for a fee at 1-888-592-6800.

Or, send us an e-mail at **techsupport@infocus.com**.

In Europe, call InFocus in The Netherlands at **(31) 35-6474010**.

In Asia, call InFocus in Singapore at **(65) 353-9449**.

INTRODUCTION

The InFocus® LP790™ multimedia projector is specifically designed for multipurpose use. It is easy to connect, easy to use, easy to transport, and easy to maintain.

Image Resolution

The XGA resolution of the LP790's projected image is 1024x768. The projector is compatible with screen resolutions up to 1600x1200. If your computer's screen resolution is higher than 1600x1200, reset it to a lower resolution before you connect the projector**.**

Compatibility

The projector is compatible with a wide variety of computers and video devices, including:

- IBM-compatible computers, including laptops, up to 1600x1200 resolution.
- Apple® Macintosh® and PowerBook® computers up to 1600x1200 resolution.
- Most standard VCRs, DVD players, HDTV players, camcorders and laser disc players.

Unpacking the Projector

The projector comes with the items shown in Figure 1. Check to make sure all are included. **Contact your InFocus dealer immediately if anything is missing**.

If you are experienced in setting up presentation systems, use the *Quick Start* card that was included in the shipping box. For complete details on connecting and operating the projector, refer to this User's Guide. Electronic versions of this user's guide in multiple languages are available on the included CD and on our website at www.infocus.com.

NOTE: *The LP790 automatically expands 640x480 and 800x600 images to 1024x768.*

NOTE: *The projector is compatible with 1080i and 720P HDTV formats.*

A registration card is included in the box. Register to receive product updates, announcements, and special offers from InFocus. Or, register online at www.infocus.com/service/register and you will be automatically entered to win free merchandise.

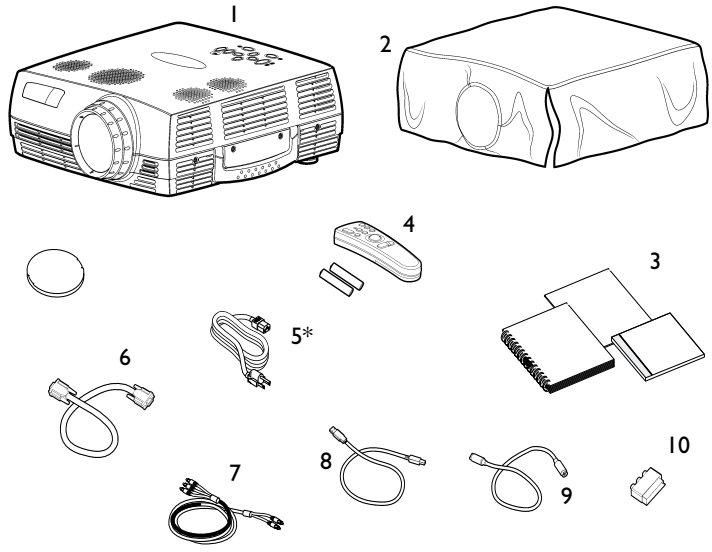


FIGURE 1

Shipping box contents

1. Projector + lens cap
2. Dust cover
3. User's Guide, Quick Start card, and CD
4. Remote control with batteries
5. Power cord*
6. Computer cable
7. Audio/Video cable
8. USB mouse cable
9. S-Video cable
10. SCART adapter

*additional country-dependent power cords may be included

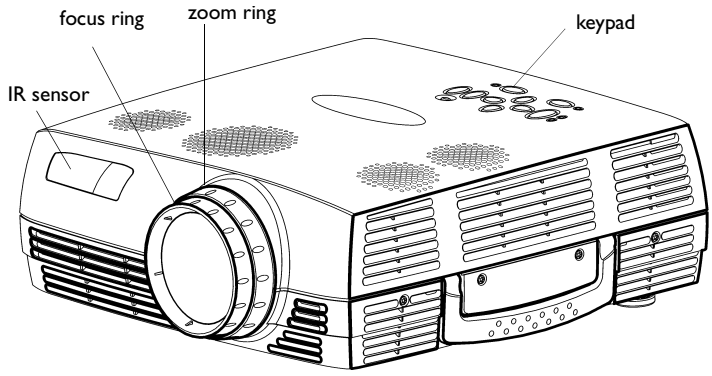


FIGURE 2

Front view of projector

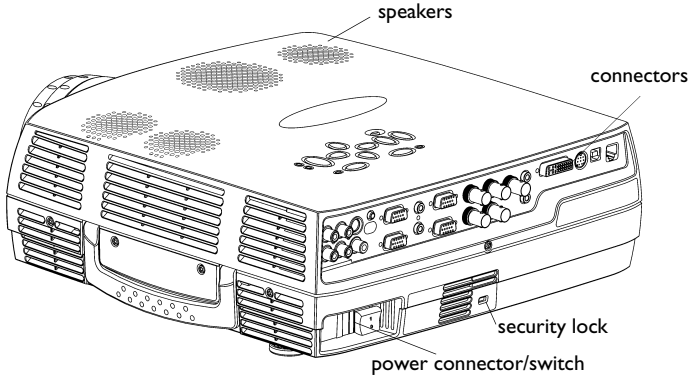


FIGURE 3

Rear view of projector

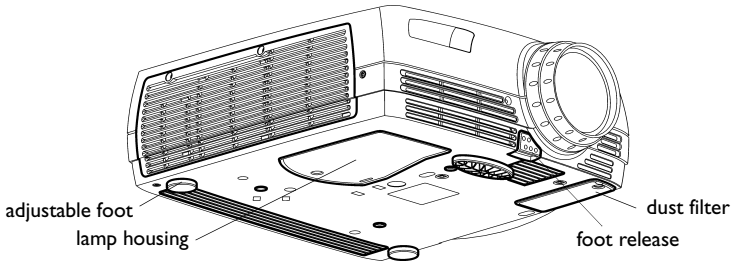


FIGURE 4

Bottom view of projector

Usage Guidelines

- Do not look directly into the projection lens when the projector is turned on. The bright light may harm your eyes.
- Do not block the grills on the projector. Restricting the air flow can cause it to overheat and turn off. If this happens, you must wait a minute before attempting to turn it back on.
- Handle the projector as you would any product with glass components. Be especially careful not to drop it.
- Avoid leaving the projector in direct sunlight or extreme cold for extended periods of time. If this happens, allow it to reach room temperature before use.
- Transport the projector in a vendor-approved hard or soft case. Part numbers for these cases are listed on page 45.

If You Need Assistance

The first place to look for help is in this manual. Be sure to check the guidelines in "Troubleshooting" on page 38. Or, check the Service and Support section of our website at **http://www.infocus.com/service.** You'll find a Technical Library, FAQs, and support contacts including a technical support e-mail form.

NOTE: *For general product information, please call 1-800-294-6400.*

If those sources don't answer your question, call your InFocus dealer. You can also call InFocusTechncial Support directly at **1-800-799-9911**. Call between 6 a.m. and 6 p.m. PST, Monday through Friday. Service is available in North America after hours and on weekends for a fee at 1-888-592-6800.

In Europe, call InFocus in The Netherlands at **(31) 35-6474010**. In Asia, call InFocus in Singapore at **(65) 353-9449**.

Or, send us an e-mail at **techsupport@infocus.com**

Our World Wide Web address is **http://www.infocus.com**.

Warranty

This product is backed by a limited two-year warranty. The details of the warranty are printed at the back of this manual. An extended warranty plan may be purchased from your InFocus dealer, any time during the original two year warranty period. Refer to page 45 for the part number.

When sending your projector in for repair, InFocus recommends shipping the unit in its original packing material, or having a professional packaging company pack the unit for shipping. Please insure your shipment for its full value.

SETTING UP THE PROJECTOR

1 Place the projector on a flat surface.

- The projector must be within 13 feet (4 m) of your power source and your computer.
- If you want to project from behind a translucent screen, set up the projector behind your screen. See "Rear" on page 27 to reverse the image.
- If you are installing the projector on the ceiling, refer to the installation guide that comes with the Ceiling Mount Kit for more information. To turn the image upside down, see "Ceiling" on page 27. The Ceiling Mount Kit is sold separately, see "Optional Accessories" on page 45.

2 Position the projector the desired distance from the screen.

- If the image is too big or too small, use the zoom ring to adjust the size or move the projector forward or backward. Figure 5 shows three projected image sizes. For more information about image size, see "Projected Image Size" on page 52.

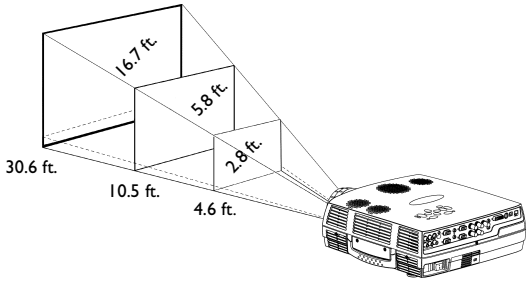


FIGURE 5

Projected image size

3 Make sure the projector and the computer are turned off.

NOTE: *The projector must be at least 3.9 feet (1.2 m) from the projection screen.*

***NOTE**: Before you continue, make sure the projector and all other equipment is turned off. If you're connecting a computer, make sure the distance between it and the projector is 13 feet or less.*

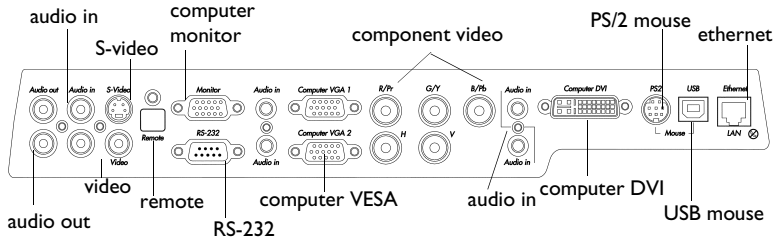


FIGURE 6

Connector panel

***NOTE:** If you are connecting an older Macintosh computer that does not have a 15-pin connector, you must use a Mac adaptor between the computer and the projector. See "Optional Accessories" on page 45.*

The projector has the following audio/video inputs:

Source	Video	Audio
Computer RGBHV	3 Single-ended analog RGB + 2 H&V sync (5 BNCs)	mini jack
Computer VESA* (2)	VESA Single-ended analog RGB (HD-15)	mini jack
Computer-DVI	DVI-D	mini jack
Compo-nent Video	Base-band component video (BNC)	Left and right line-level (2 RCAs)
Composite Video*	Base-band composite video (RCA)	Left and right line-level (2 RCAs)
S-Video*	S-video Y/C (4-pin circular)	Left and right line-level (2 RCAs)

* indicates cable included with projector.

Connecting a Computer

1. Plug one end of the computer cable into a blue "Computer VGA" connector on the projector.
2. Plug the other end of the computer cable into the monitor connector on your computer. If you are using a desktop computer, you need to disconnect your monitor cable from your computer.

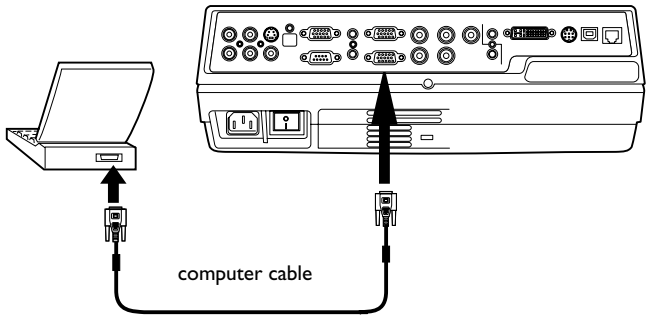


FIGURE 7

Connecting the projector to a computer

Do you want to play your computer's audio on the projector?

1. Plug either end of the audio cable (ordered separately) into the audio connector on your computer.
2. Plug the other end of the audio cable into an "Audio in" connector on the projector.

Do you want to display the image on your desktop computer's monitor as well as on the projection screen?

1. Plug the monitor's cable into the "Monitor" connector on the projector.

NOTE: *Many laptop computers do not automatically turn on their external video port when a secondary display device such as a projector is connected. Refer to your computer manual for the command that activates the external video port. Activation commands for some laptop computers are listed in the Appendix of this manual on page 46 and in the Service section of our website.*

Do you want to control the computer's mouse from the projector's remote?

If your computer has a USB connector and is running Windows 98, use the USB mouse cable.

1. Plug the flat end of the USB mouse cable into the mouse connector on your computer.
2. Plug the square end of the USB mouse cable into the "USB" connector on the projector.

You must have the appropriate USB drivers installed on your computer to use the USB feature. Windows 98 ships with the appropriate drivers.

NOTE: *The USB mouse is supported for use with Windows 98 or higher only.*

If your computer has a PS/2 connector, use an optional PS/2 mouse cable.

1. Plug one end of the PS/2 mouse cable into the mouse connector on your computer.
2. Plug the other end of the PS/2 mouse cable into the "PS2" connector on the projector.

NOTE: *If your computer has a PS/2 mouse, purchase an optional PS/2 mouse cable.*

Now you're ready to power up the projector and your computer. Skip to "Powering up the Projector" on page 13.

NOTE: *You do not need to restart your computer after connecting a USB mouse to use it (it is hot-pluggable). You must restart your computer after plugging in a PS-2 mouse.*

Connecting a Computer with a DVI Cable

Connect the optional DVI cable to the "Computer DVI" connector on the projector (see Figure 6 on page 8) and your computer.

Connecting a Computer with an RS-232 Cable

You can control the projector from an LCD control panel by connecting an RS-232 cable to the projector (see Figure 6 on page 8). Specific RS-232 commands can be found in the Service and Support section of our website at www.infocus.com.

Connecting a Video Player

If your video device (VCR, DVD player, video camera) uses a round, one-prong composite video connector, use the composite audio/video (A/V) cable.

- If your video device uses a round, four-prong S-video connector, use the S-video cable. S-video generates a higher quality image.

1. Plug the A/V cable's round yellow connector into the "video-out" connector on your video device (Figure 8). This connector may be labeled "To Monitor."
   - If you're using an S-video cable, connect the round black connector to the "S-video out" connector on the video device.
2. Plug the other yellow connector into the "Video" connector on the projector.
   - If you're using S-video, plug the other end of the cable into the "S-Video" connector on the projector.

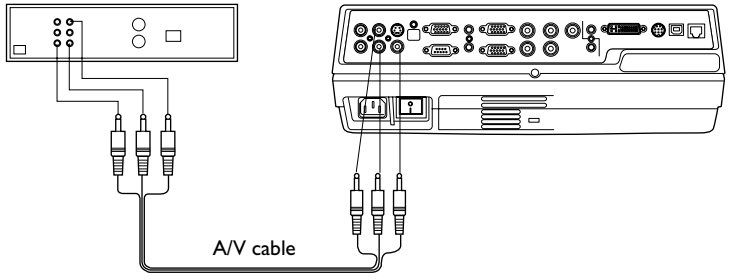


FIGURE 8

Connecting the projector to a VCR using the A/V cable

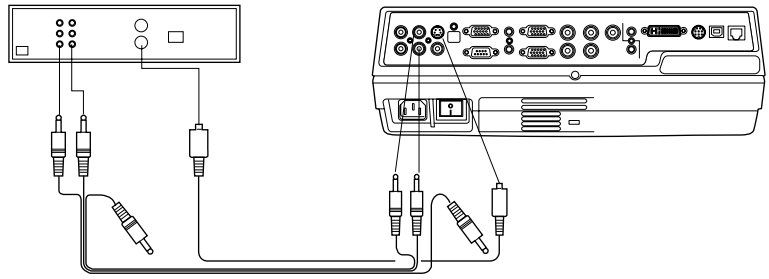


FIGURE 9

Connecting the projector to a VCR using the S-video cable

3 Plug the A/V cable's white connector into the left "audio out" connector on your video device. Plug the cable's red connector into the right "audio out" connector on the video device.

4 Plug the other ends of the A/V cable into the red and white "Audio in" connectors on the projector.

The projector is compatible with these major broadcast video standards: NTSC, NTSC 4.43, PAL, PAL-M, PAL-N, PAL-60, and SECAM. It automatically adjusts to optimize its performance for the incoming video.

CAUTION: *Your video player may also have a "Video Out" connector for a coaxial cable connection. DO NOT use this to connect to the projector.*

Connecting a Video Player using BNC Cables

Connect the BNC cables and audio cables to the appropriate connectors on the projector (Figure 6 on page 8) and on your video player.

Connecting External Speakers

To connect external speakers, plug the speaker cable into the "Audio out" connectors (Figure 6 on page 8) on the projector. The speaker must be amplified.

NOTE*: For more information on using the remote, see page 19.*

Connecting the Remote Control Cable

If the projector cannot receive the remote's signal, as may be the case if you're using rear projection, connect the remote directly to the projector with the optional remote cable. See "Optional Accessories" on page 45. Plug the remote cable into the "Remote" connector on the projector. Plug the other end into the connector on the end of the remote.

Powering up the Projector

1 Remove the lens cap.

2 Plug the power cord into the back of the projector, then plug it into your electrical outlet. A surge-protected power strip is recommended.

3 Press the power switch on the back of the projector.

- The LED on the top of the projector (Figure 6 on page 8) lights orange after a few seconds.

4 After the LED lights orange, press the **Power** button on the projector's keypad or remote. A tone sounds when you press the button.

- The fans start to run, the LED on the top of the projector blinks green (it lights solid green if the projector is connected to a valid source), and the InFocus startup screen appears. It takes about one minute for the image to achieve full brightness.

5 If you connected a video player, turn it on.

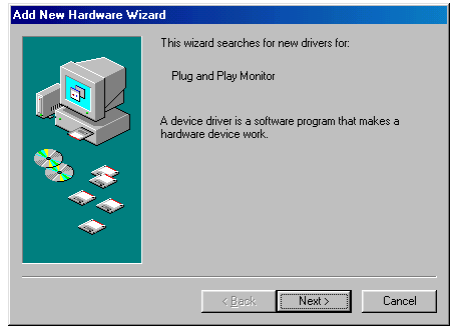
- The video image should display on the projection screen. If it doesn't, press the **Video** button on the keypad or remote (page 21) to display your video image.

6 If you connected a computer, turn it on.

a The first time you connect a particular computer to the projector, the computer recognizes the projector as "new hardware" and the Add New Hardware Wizard appears. Follow these instructions to use the Wizard to load the correct driver (which was installed with your Windows operating system).

***NOTE**: Always use the power cord that shipped with the projector.*

***NOTE**: The first time you connect your computer to the projector, the computer may display a message stating that new hardware was found. The Add New Hardware Wizard may appear. Use the Wizard to load the correct driver (the computer considers the projector a Plug and Play Monitor).*


Add New Hardware Wizard
This wizard searches for new drivers for:
Plug and Play Monitor
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

Click Next. Make sure “Search for the best driver” is selected, then click Next.

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended).
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

Uncheck any checked boxes, then click Next. Windows automatically locates the driver. If this driver has been removed, reload the driver using your Windows operating system CD.

Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
c:\windows\inf
Browse...
< Back
Next >
Cancel

When Windows finds the driver, you are ready to install it. Click Next.

Add New Hardware Wizard
Windows driver file search for the device:
Plug and Play Monitor
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
C:\WINDOWS\INF\MONITOR.INF
< Back
Next >
Cancel

Click Finish when installation is complete.

7 The computer image should display on the projection screen. If it doesn't, press the **Computer** button on the keypad or the remote to display your computer's image.

- Make sure your laptop's external video port is activated; see "Portable and Laptop Activation Chart" on page 46 for details.
- If necessary, make adjustments to the image using the projector's on-screen menus. To open the menus, press the **Menu** button on the keypad or remote. For more information about the menus, see page 23.

***NOTE**: With some computers, the order in which you power up the equipment is very important. Most computers should be turned on last, after all other peripherals have been turned on. Refer to your computer's documentation to determine the correct order.*

Turning Off the Projector

To turn off the projector, press the **Power** button. A dialog box appears, asking for confirmation. Press **Power** again to turn the lamp off. The fans continue to run for 90 seconds, then the projector shuts off.

If you want to turn the lamp back on, you must allow 90 seconds for the lamp to cool. The lamp won't light if it's too hot.

You can also use the Display Power Management System (DPMS) to automatically turn the projector off if no active source is found. See page 27 for details.

NOTE: *To maximize lamp life, allow the projector to run for at least five minutes before turning it off.*

USING THE PROJECTOR

This section describes how to use and make adjustments to the projector. It also provides a reference to the keypad and remote buttons and the options available from the on-screen menus.

Basic Image Adjustment

1. Make sure you have powered up your equipment in the right order (page 13).
2. If the image doesn't display completely, zoom the image (page 17), adjust the height of the projector (page 18) or center the image by adjusting its horizontal or vertical position (page 26). Be sure the projector lens is at a 90 degree angle to the screen.
3. If the image is out of focus, rotate the focus ring (page 17).
4. If the colors don't look right, adjust the brightness, contrast, tint, or color (page 24).

Adjusting the Projector

To focus the image, rotate the focus ring (Figure 10) until the image is clear. To zoom the image, rotate the zoom ring. This adjusts the image size.

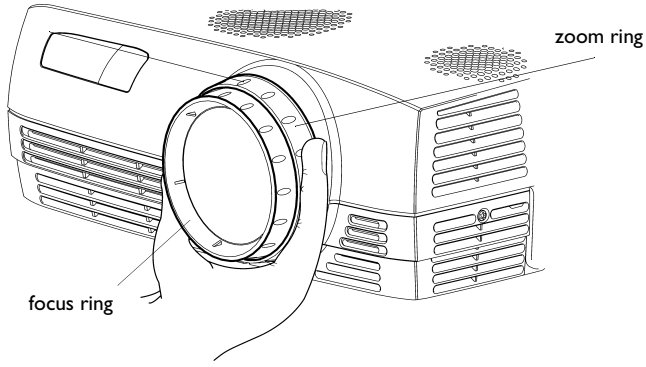


FIGURE 10

Focus ring and zoom ring

NOTE: *To obtain the best overall focus quality, open the menu and focus on the text. This will ensure that the best overall image quality is achieved.*

The projector is equipped with a self-locking, quick-release foot and two leveling feet.

To raise the projector:

1. Raise the projector to the height you want, then press and hold the foot release button. Release the button to lock the foot into position (Figure 11).
2. If necessary, rotate the leveling feet to adjust the angle of the projected image.

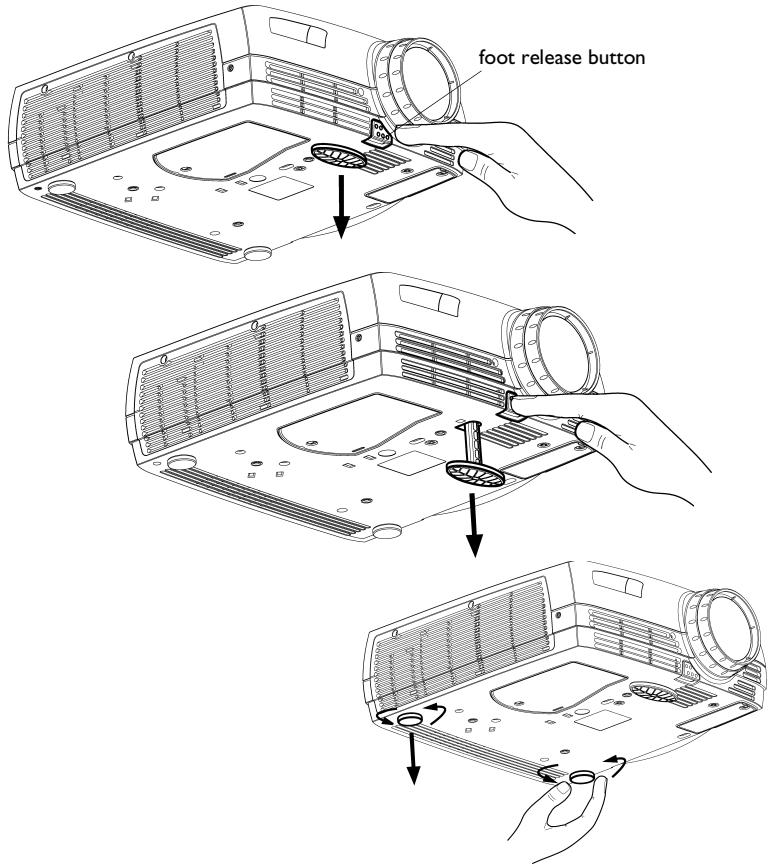


FIGURE 11

Adjusting the height of the projector

Using the Remote Control

To control the computer's mouse from the projector's remote, you must connect the USB or PS/2 mouse cables to the computer and the projector. See page 10 for details.

To turn the remote on, move the switch on the side of the remote to the On position. The remote's LED lights red when buttons on the remote are pushed.

Point the remote control at the projection screen or at the front or rear of the projector (not at the computer). The range for optimum operation is about 40 feet. If you point the remote at the projection screen, the distance to the screen and back to the projector must be less than or equal to 40 feet. For best results, point the remote directly at the projector.

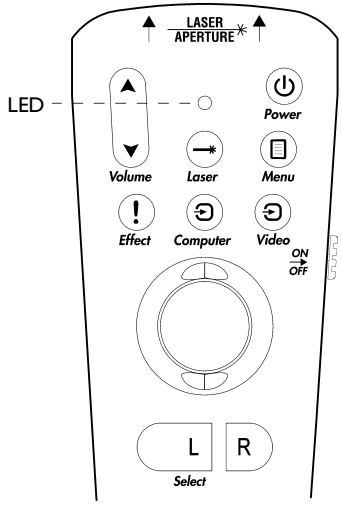


FIGURE 12

Remote control

Press anywhere on the edge of the track ball to move the cursor on the screen. You can move the cursor at any angle by moving the track ball in the corresponding direction. The R and L buttons simulate your computer's right and left mouse buttons.

NOTE: *If you can't aim the remote control at the projector so that its signal is received — for example, when using rear projection — use the optional remote control cable to connect the remote directly to the projector.*

To use the laser pointer, press and hold the **Laser** button. The laser goes off when the button is released.

If you are creating presentations in Microsoft® PowerPoint®, you can use the remote's mouse buttons to navigate through your presentation while in Slide Show mode. To configure PowerPoint for this, choose Options from the Tools menu, click the View Tab, de-select the "Popup Menu on Right Mouse Click" option in the Slide Show section, then click OK. Then, when you're in PowerPoint's Slide Show mode, a left click advances to the next slide and a right click returns to the previous slide (other PowerPoint modes are not affected).

Using the Keypad and Remote Buttons

While the menus are displayed, the **Keystone** and **Volume** buttons on the keypad and the track ball on the remote act as menu navigation and adjustment buttons. See "Using the On-Screen Menus" on page 23 for details.

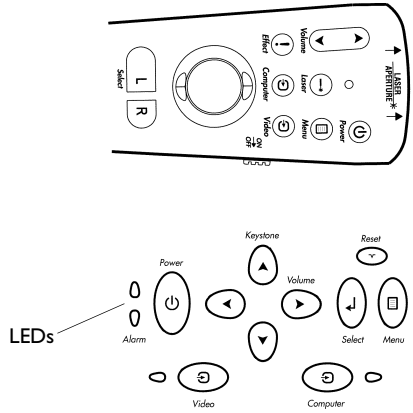


FIGURE 13

Keypad and remote buttons

Menu

Press the **Menu** button to open the on-screen menus. Press **Menu** again to close the menus. When you close the menus, the projector saves any changes you made. The menu automatically closes after 1 minute if no buttons are pressed. For more information about the on-screen menus, see page 23.

Computer and Video

When you have more than one source (computer and video) connected to the projector, select between them by pressing the **Computer** or **Video** buttons. A "Source Select" dialog box appears. Use the track ball or arrow keys to highlight the desired source, then press **Select**.

Power

Press this button to turn the projector on and off. See page 13 and page 16 for details.

Volume

Press the **Volume** buttons to adjust the volume.

Arrow buttons (keypad only) or track ball (remote only)
Use these to navigate through and make adjustments to the on-screen menus. See "Using the On-Screen Menus" on page 23 for details.

Keystone (keypad only)
Use this feature to adjust the image vertically and make a squarer image.

1 Press the **Keystone up** arrow to reduce the upper part of the image, and press the **Keystone down** arrow to reduce the lower part. You can adjust this from -15 degrees to +40 degrees. You can also adjust keystone from the Basic menu (see page 25 for details on the menu).

2

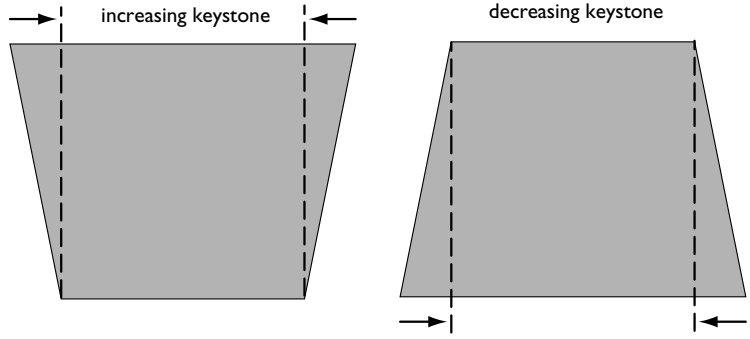


FIGURE 14

Adjusting the keystone

Effect (remote only)
Press this button to invoke the presentation effect. The default effect is magnify. You can select among freeze, mask, mute, and 16:9. See page 28 for details.

To use the magnify effect, press **Effect**, then use the track ball to magnify the image. If you press **Effect** again, you can use the arrows to pan the image, displaying different parts of it (only if the image is magnified). To return to magnify mode, press the **Select** (or **L**) button. To return to the original size, press the **Effect** button twice.

Laser (remote only)
Press the **Laser** button to turn the laser on. The laser goes out when the button is released.

Reset (keypad only)
This re-synchronizes the projector to your computer.

Using the On-Screen Menus

The projector has menus that allow you to make image adjustments and change a variety of settings.

To open the on-screen menus, press the **Menu** button on the keypad or remote. This displays the **Basic** menu and changes the **Keystone** and **Volume** buttons on the keypad to menu navigation buttons. Press the down arrow button to move the cursor down and press the up arrow button to move the cursor up, or use the track ball on the remote. The selected menu is highlighted.

FIGURE 15

On-screen menu

To change a menu setting, use the up and down arrow buttons or the track ball to move the cursor up and down to the item you want to change (the selected item is highlighted), then press the **Select** button. Use the left and right arrows or the track ball to adjust the setting or to turn a setting on or off. Press **Select** when you are done.

To access a sub-menu, highlight it and press **Select**. To navigate back to the previous menu, highlight the arrow at the top of the menu and press **Select**.

Use the up and down arrows or the track ball to move to another setting. When you have completed your adjustments, press **Menu** to close the menus.

NOTE: *Some menu items may be grayed out (dimmed) at certain times. This indicates the item is not applicable to your setup or the item is not enabled until another selection is made.*

Basic Menu

FIGURE 16

Basic menu

Contrast

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

- Use the up and down arrows to highlight Contrast, press **Select**, use the left and right arrows to adjust the contrast from 0 to 100 in the slider bar, then press **Select** to accept your changes.

Brightness

Adjusting the brightness changes the intensity of the image.

- Use the up and down arrows to highlight Brightness, press **Select**, use the left and right arrows to adjust the brightness from 0 to 100 in the slider bar, then press **Select** to accept your changes.

NOTE: *The color setting applies to video sources only.*

Color

The color setting adjusts a video image from black and white to fully saturated color.

- Use the up and down arrows to highlight Color, press **Select**, use the left and right arrows to adjust the color from 0 to 100 in the slider bar, then press **Select** to accept your changes.

Keystone

This option helps to keep the image square as the angle of projection is changed. Use this feature to adjust the image vertically and make a squarer image. You can adjust this from -15 degrees to +40 degrees. See page 22 for details on keystone adjustments.

- Press the down button to highlight Keystone, then press **Select**. Use the left and right arrows to adjust the keystone setting from -15 to 45 in the slider bar. Press **Select** to accept your changes.

Setup

See the following pages for details on this menu.

Reset

This re-synchronizes the projector to your computer.

About

This read-only menu provides information about the source, such as resolution and horizontal and vertical frequencies.

Setup menu

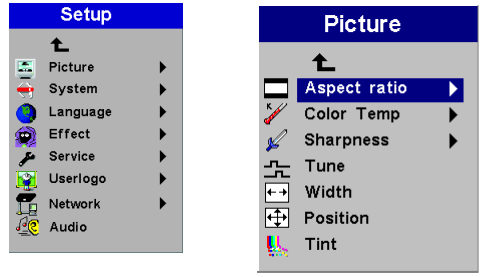


FIGURE 17

Setup and Picture menus

Picture menu

- **Aspect Ratio**: The default is 4:3. Click 16:9 if you are watching videos in widescreen format. Click Native to display the image in its native format. Highlight Aspect Ratio, press **Select**, use the up and down arrows to highlight your selection, press **Select**, then press the left arrow to return to the Picture menu.
- **Color Temp**: The default is 7300. Choose a different value to adjust the amount of red in the image.
- **Sharpness**: Adjusts the sharpness of video images.
- **Tune**: Use the left and right arrows to adjust the horizontal phase and fine tuning of the image.
- **Width**: Use the left and right arrows to adjust the width of the image.
- **Position**: Use the left and right arrows to adjust the horizontal position of the image and use the up and down arrows to adjust the vertical position.
- **Tint:** Use the left and right arrows to adjust the tint of video images.

System menu

Turn the features in the System menu on and off by highlighting them and pressing **Select**. A checkmark in the box indicates the feature is on; an empty box means the feature is off.

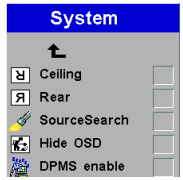


FIGURE 18

System menu

- **Ceiling**: This turns the image upside down for ceiling-mounted projection.
- **Rear**: This reverses the image so you can project from behind a translucent screen.
- **SourceSearch**: When this feature is on, the projector automatically searches for an active source. When it is off, you must press the **Computer** or **Video** buttons to switch among sources.
- **Hide OSD**: This hides the on-screen display (OSD) of the adjustment bars that appear when you adjust things using the keypad or remote, such as volume. It does not hide the menu's adjustment bars.
- **DPMS enable**: This turns the Display Power Management System (DPMS) on. When it is on, the projector turns the lamp off after 3 minutes of not detecting an active source. The projector will return to normal activity immediately if it detects an active source. After 5 additional minutes, the projector turns off. You must press the **Power** button to turn the projector back on. The LED blinks green when in DPMS mode.

Language menu

You can display the on-screen menus in English, German, Spanish, French, Italian, Dutch, Norwegian, Portuguese, Japanese, Chinese, or Simplified Chinese. Highlight the desired language, then press **Select**. The menus redraw immediately.

FIGURE 19

Language menu

Effect menu

This menu allows you to assign a different effect to the **Effect** button on the remote. The default effect is magnify. Highlight an effect and press **Select** to choose a different one.

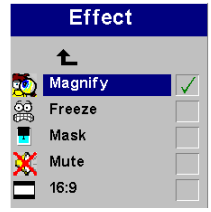


FIGURE 20

Effect menu

- **Magnify**: This allows you to enlarge and display different parts of the image. See page 22 for details on magnify.
- **Freeze**: This freezes the projected image.
- **Mask**: This masks the projected image with a black screen.
- **Mute**: This mutes the sound.
- **16:9**: This allows you to switch between 4:3 and 16:9 widescreen formats.

Service menu

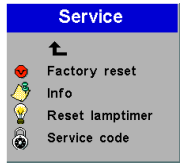


FIGURE 21

Service menu

- **Factory reset**: This resets all options (except ceiling, rear, language, IP address, and lamp time) to the original factory settings. Highlight it, then press **Select**. A confirmation dialog box appears. Press **Select** to reset, or press the right arrow button to highlight No, then press **Select** if you don't want a reset.
- **Info**: This read-only window provides information on the projector's software, the number of hours the current lamp has been in use, and selected image settings. Press **Select** to close this window.
- **Reset lamptimer**: This resets the lamp hour timer to zero. After replacing the lamp (page 35), highlight Reset lamptimer, press **Select**, then press it again to confirm your selection. The timer in the Info window resets to zero.
- **Service Code**: This window can only be accessed by service personnel by entering a code.

User's logo menu

This menu allows you to display a blank blue or black screen instead of the default InFocus screen at startup and when no source is detected. It also allows you to capture and display a custom logo.

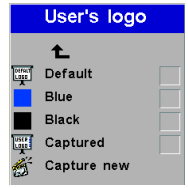


FIGURE 22

User's logo menu

- Highlight the desired color, press **Select**, then press the left arrow to return to the previous menu.
- To capture a custom logo, display the image you want to capture on your computer, highlight Capture New, then press **Select**. Press **Select** (**L**) on the remote to capture the image. The projector confirms the capture.

Network menu

The projector has an RJ45 Ethernet connector (Figure 8 on page 11) that supports standard network connections and TCP/IP protocols. This will allow for the control and management of the projector over a corporate network. Contact your InFocus dealer for details on this emerging technology.

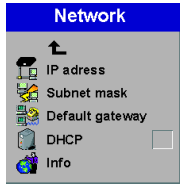


FIGURE 23

Network menu

- **IP Address:** Identifies your projector on the network.
- **Subnet mask:** Separates the network address part of the IP address.
- **Default gateway:** The IP address of the local router.
- **DHCP:** Select this to automatically obtain an IP address, Subnet mask, and Default gateway.
- **Info:** Provides information on the network configuration.

***NOTE**: If you are connected to a local network, contact your network administrator to get a valid IP address, subnet mask, and default gateway address.*

Audio

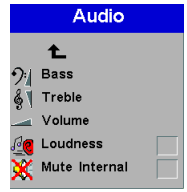


FIGURE 24

Audio menu

- **Bass, Treble, Volume:** Adjusts these audio features.
- **Loudness:** This enhances bass and treble for low tones.
- **Mute Internal:** This silences the internal speakers.

MAINTENANCE & TROUBLESHOOTING

This section describes how to:

- clean the lens
- clean the air intake dust filter
- replace the projection lamp
- replace the batteries in the remote
- use the security lock feature
- troubleshoot the projector

Cleaning the Lens

Follow these steps to clean the projection lens:

1. Apply a non-abrasive camera lens cleaner to a soft, dry cloth.
   - Avoid using an excessive amount of cleaner, and don't apply the cleaner directly to the lens.
   - Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.
2. Lightly wipe the cleaning cloth over the lens in a circular motion.
3. If you don't intend to use the projector immediately, replace the lens cap.

Cleaning the Dust Filter

The dust filter catches dust and other particles in the air. If the filter becomes clogged, the projector does not cool properly and may malfunction.

1. Turn off the projector and unplug the power cord.
2. Turn the projector upside down, loosen the screw on the filter, then gently pry the filter up.

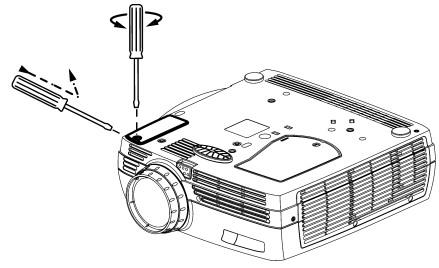


FIGURE 25

Removing the dust filter

3 Clean the filter using a vacuum cleaner on low power.

4 Replace the filter and tighten the screw.

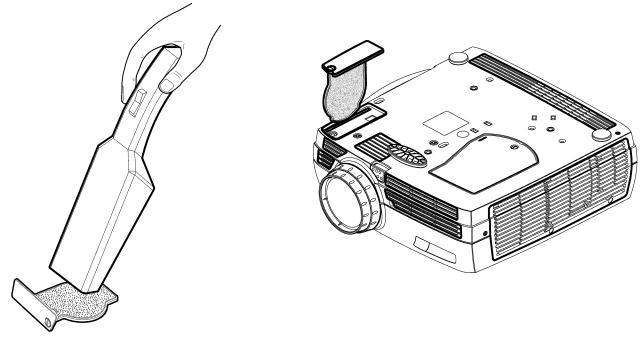


FIGURE 26

Cleaning the filter

Replacing the Projection Lamp

The lamp hour timer in the Service Info menu counts the number of hours the lamp has been in use. When the timer reaches 2000 hours, the Alarm LED lights red, indicating that it is time to change the lamp. You can order new lamp housings from your InFocus dealer. See "Accessories" on page 44 for information.

Follow these steps to replace the projection lamp:

1. Turn off the projector and unplug the power cord.
2. Wait 60 minutes to allow the projector to cool thoroughly.
3. Turn the projector upside down and loosen the captive screw on the lamp door.

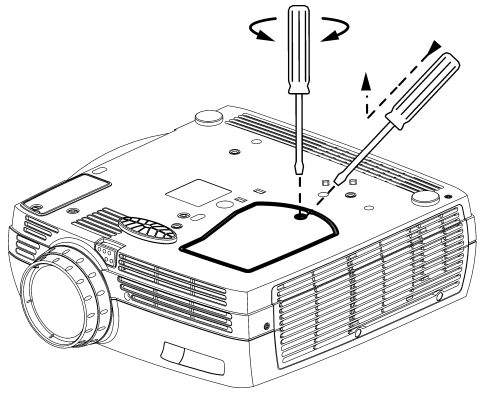


FIGURE 27

Removing the screw on the lamp door

4. Insert the screwdriver in the tab on the lamp door and pry the door up.
5. Loosen the three captive screws on the lamp housing.

WARNING: *To avoid burns, allow the projector to cool for at least 60 minutes before you replace the lamp. Never extract the lamp housing while the projector is operating.*

WARNING: *Be extremely careful when removing the lamp housing. In the unlikely event that the bulb ruptures, small glass fragments may be generated. The lamp module is designed to contain these fragments, but use caution when removing the lamp module.*

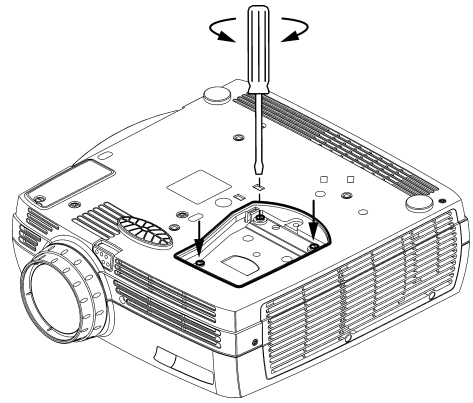


FIGURE 28

Loosening the screws on the lamp housing

6 Carefully remove the lamp housing. Dispose of the lamp in an environmentally proper manner.

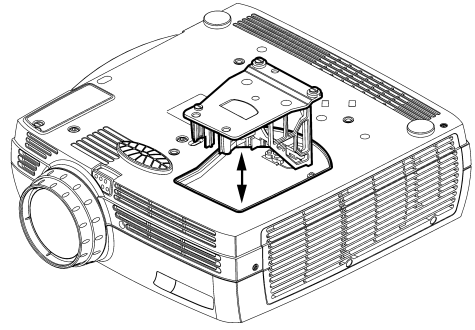


FIGURE 29

Removing the lamp housing

7 Install the new lamp housing and tighten the screws.

8 Replace the lamp door.

9 Plug in the power cord, press the Power switch, then press the **Power** button to turn the projector back on.

10 To reset the lamp hour timer, navigate to the Setup/Service menu and choose Reset lamptimer. See page 29 for details on the Service menu.

WARNING: *Do not drop the lamp module or touch the glass bulb! The glass may shatter and cause injury.*

Replacing the Batteries in the Remote Control

The life of the batteries depends on how often and how long you use the remote. Symptoms of low battery charge include erratic responses when using the remote and a reduced range of operation.

1. Turn the remote face down in your hand.
2. Slide the door off the end of the remote.
3. Remove the old batteries and dispose of them in an environmentally proper manner.
4. Install two new AAA alkaline batteries. Make sure you install each in the correct direction.

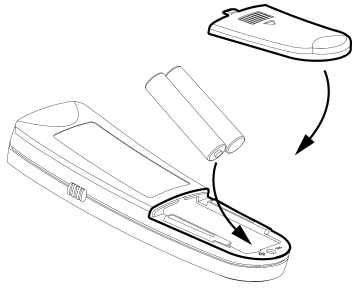


FIGURE 30

Replacing the batteries in the remote

5. Re-install the door.

Using the Security Lock

The projector has a security connector for use with a PC Guardian Cable Lock System (Figure 31). See "Optional Accessories" on page 45 for ordering information. Refer to the information that came with the lock for instructions on how to use it.

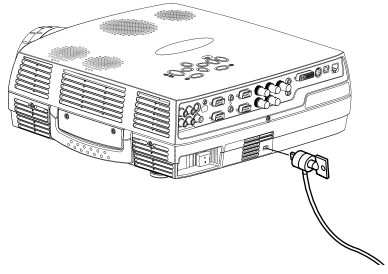


FIGURE 31

Installing the security lock

Troubleshooting

LEDs

The Alarm LED on top of the projector (Figure 13 on page 21) will alert you to certain problems.

- A solid red Alarm LED means it is time to change the lamp. See page 35.
- A blinking red Alarm LED means the projector is overheating. Turn off the projector and allow it to cool.

The other LED on top of the projector indicates the normal operating state of the projector.

- A solid green LED means the projector is on.
- A blinking green LED means the projector does not recognize an active source or is in DPMS mode. See page 27.
- An blinking orange LED means the projector is going into DPMS mode; a solid orange LED means the projector is in standby or DPMS mode. See page 27 for details.

Problem: The projector is not running

- Make sure that the power cord is properly connected to a functional AC electrical outlet. Make sure that the power cord is also properly connected to the projector.
- If the projector is plugged into a power strip, make sure the power strip is turned on.
- Make sure the projector is turned on. Verify that the LED is solid green.

Problem: Projector is running, but nothing appears on projection screen

- Make sure you have removed the lens cap on the projection lens at the front of the projector.
- Make sure Mask is not active in the Effect menu. See page 28.
- Check the projector's lamp housing to ensure that it is securely connected to the bottom case. See "Replacing the Projection Lamp" on page 35.

Problem: Only the start-up screen displays

- Verify that the cables are connected correctly. See page 9 for connection procedures.
- Make sure that the cables do not have any bent pins.
- Verify that the proper input source is connected. See "Computer and Video" on page 21.
- Try resetting the projector. See page 25.
- You might need to turn everything off and power up the equipment again in the proper order. Refer to your computer's documentation to determine the correct order.
- Make sure your laptop's external video port is turned on. See the "Portable and Laptop Activation Chart" on page 46 or your computer's manual for details.
- Make sure your computer's video board is installed and configured correctly.
- Make sure your computer has a compatible video board. The projector isn't CGA or EGA compatible.

If you're using Windows 98:

1. Open "My Computer" icon, the Control Panel folder and then the Display icon.
2. Click the Settings tab.
3. Verify that the Desktop area is set to 1600x1200 or less.

Problem: Color or text not being projected

- You might need to adjust the brightness up or down until the text is visible. Refer to "Brightness" on page 24 for more information.

Problem: The screen resolution is not right

- Make sure the computer's video card is set for a resolution of no greater than 1600x1200.

Problem: Image isn't centered on the screen

- Move the projector to reposition the image.
- Reposition the image using the menu. Refer to page 26.
- Be sure the projector lens is at a 90 degree angle to the screen.

Problem: Image is too wide or narrow for screen

- Adjust the zoom or projector placement.
- Adjust the width of the image. See page 26.

Problem: Image is out of focus

- Turn the projection lens to focus the image.
- Make sure the projection screen is at least 3.9 feet (1.2 m) from the projector, and that the projector is at a 90 degree angle to the screen.
- Check the projection lens to see if it needs cleaning.

Problem: Image and menus are reversed left to right

- Rear projection mode is probably turned on. Turn Rear off in the System menu. The image should immediately return to forward projection. See page 27.

Problem: Image and menus are upside down.

- Ceiling mode is probably turned on. Turn Ceiling off in the System menu. See page 27.

Problem: Projected image is distorted

- Try resetting the projector. See page 25.
- Adjust the tuning of the image. See page 26.

Problem: Projected colors don't match the computer or video player's colors

- Just as there are differences in the displays of different monitors, there are often differences between the computer image and the projected image. Adjust the brightness, color and/or contrast in the Main menu. See page 24.

Problem: Lamp seems to be getting dimmer

- The lamp begins to lose brightness when it has been in use for a long time. Replace the lamp as described in "Replacing the Projection Lamp" on page 35.

Problem: Lamp shuts off

- A minor power surge may cause the lamp to shut off. Turn off the projector, wait at least a minute, then turn it back in.
- Make sure the vents on the bottom and back of the projector are not blocked.

The most current troubleshooting information can be found in the Service and Support section of our website at **http://www.infocus.com/service.** You'll also find a Technical Library, FAQs, and support contacts including a technical support e-mail form.

Before calling your dealer or InFocus Technical Support for assistance, please have the following information available:

- the model name of your projector
- the projector's serial number (located on the bottom label)
- the projector's software version (located in the Service/Info menu.See page 29 for details.
- the resolution of your computer.

Call InFocus Technical Support at **1-800-799-9911** between 6 a.m. and 6 p.m. PST, Monday through Friday. Service is available in North America after hours and on weekends for a fee at 1-888-592-6800.

In Europe, call InFocus in The Netherlands at **(31) 35-6474010** between 8 a.m. and 6 p.m. Central European Time.

In Asia, call **(65) 353-9449** between 9 a.m. and 6 p.m.

Or, send us an e-mail at **techsupport@infocus.com**

APPENDIX

Specifications

The projector must be operated and stored within the temperature and humidity ranges specified.

Temperature	
Operating	41 to104° F (5 to 40° C) at sea level 41 to 98° F (5 to 35° C) at 10,000 feet
Non-operating	-4 to 140° F (-20 to 60° C)

Altitude	
Operating	0 to 10,000 feet (~3,000 meters)
Non-operating	0 to 20,000 feet (~6,000 meters)

Humidity	
Operating	20% to 80% relative humidity, non-condensing
Non-operating	10% to 90% relative humidity, non-condensing

Dimensions
5.1 x 12.7 x 13.9 inches (13.0 x 32.2 x 35.2 cm)

Weight
13 lbs. (5.9 kg) unpacked

Optics	
Focus Range	3.9 - 36.1 feet (1.2 - 11 m)

Lamp	
Type	270-watt SHP lamp

Input Power Requirements
100-240V~ 4-1,5A 50-60 Hz

Ceiling Mount
UL tested/listed ceiling mount with minimum capacity of 52 lbs (23.6kg) Minimum distance from wall:12/20 (30/50 cm) inch for proper ventilation

Accessories

Standard Accessories (ship with the projector)	**Part Number**
Quick Start card	801970
User's Guide	801466B
Dust Cover	305044
Shipping Box (with packaging)	407250
Computer Cable 6 ft (1.8 m)	301376B
Audio/Video Cable 6 ft (1.8 m)	301377A
S-Video Cable 6 ft (1.8 m)	301106
USB Mouse Cable	301160
European Power Cord (additional country-dependant power cords may be included)	300093
Remote	200160NEU
Projection Lamp Module (included in projector)	SP-LAMP-001
Lens Cap	4009080
SCART Adapter	301130
Online User's Guide CD-ROM	802413

NOTE: *Use only InFocus-approved accessories. Other products have not been tested with the projector.*

Optional Accessories

Shipping Case (ATA approved)	CA-ATA-008
Samsonite Deluxe Travel Case	CASE-801
Ceiling Mount Kit	SP-CEIL-001
Gray LiteMount Pipe Tubing Extension	SP-LTMT-EXT-GRAY
LiteMount False Ceiling Plate	SP-LTMT-PLT
Digital/Analog Interface Card	SP-DVI-CARD
Audio/Video Cable (30'; 9m)	SP-AV30
DVI Cable (6.6', 2m)	420016
DVI-VGA Cable (6.6', 2m)	420041
Mouse Cable (13.1',4m)	301102
Replacement Projection Lamp Module	SP-LAMP-001
Wired Remote Control Cable	301145
Mind Path Gyropoint RF	GYRO-RF
Mind Path Remote Control	IR50F/X
Mind Path Pocket Point RF Remote/Laser Poniter	HW-RF-POCKTPNT
Laser Pointer	A90
Power Supply, Universal, Black	A17
VGA Long Distance Amplifier (2 VGA Ports)	A51-1
1-in-2-out VGA Distribution Amplifier	HW-VGA2OUT
Portable Projector Stand	SP-STND
PC Guardian Projector Cable Lock	SP-LOCK
eBeam (Web Enabled Electronic Meeting Assistant)	HW-EBEAM
50" Portable Projection Screen	HW-PORTSCR50
60" Deluxe Insta-Theatre Screen	HW-DLXSCRN
Pull Down Screen, 84" Diagonal	HW-WALLSCR84
3rd Year Extended Warranty (1 year extension)	EW-1YEAR
4th YearExtended Warranty (2 year extension)	EW-2YEAR

NOTE: *You can purchase these items by contacting your dealer or InFocus Catalog Sales at 1-800-660-0024. For general product information, please call 1-800-294-6400.*

NOTE: *Visit our website at www.infocus.com for the most current activation chart. It is located in the Technical Library in the Service and Support section.*

NOTE: *Usually, pressing the key commands once activates the external video port, pressing it again activates both the external and internal ports, and pressing it a third time activates the internal port. Refer to your computer's documentation for details on your specific model.*

Portable and Laptop Activation Chart

Many laptop computers do not automatically turn on their external video port when a projector is connected. Activation commands for some laptop computers are listed in the following table. (If your computer is not listed or the given command does not work, refer to the computer's documentation for the appropriate command.) On many laptops, the activation function key is labeled with an icon, for example ⌨/🖵 or the text CRT/LCD.

Computer	Key command to activate port	Key command to de-activate port
Acer	Ctrl-Alt-Esc (for setup)	Ctrl-Alt-Esc (for setup)
AST* **	FN-D or Ctrl-D	FN-D or Ctrl-D
	Ctrl-FN-D	Ctrl-FN-D
	FN-F5	FN-F5
	type from A:/IVGA/CRT	type from A:/IVGA/CRT
	FN-F12	FN-F12
AMS	FN-F2	FN-F2
AMT	setup screen	setup screen
AT&T	FN-F3 FN-F6	FN-F3 FN-F6
Advanced Logic Research	Ctrl-Alt-V	Ctrl-Alt-V
Altima	Shift-Ctrl-Alt-C	Shift-Ctrl-Alt-L
	setup VGA/ Conf.Simulscan	setup VGA/ Conf.Simulscan
Ambra**	FN-F12	FN-F12
	FN-F5	FN-F5
	F2/Choose Option/F5	F2/Choose Option/F5
Amrel* **	setup menu	setup menu
	Shift-Ctrl-D	Shift-Ctrl-D
Apple	see Mac Portable and Mac PowerBook	
Aspen	automatic	automatic
Award	FN-F6	FN-F6
BCC*	automatic	reboot computer

Computer	Key command to activate port	Key command to de-activate port
Bondwell	LCD or CRT options after bootup	reboot for LCD or CRT options to appear
Chaplet**	setup screen	setup screen
	FN-F6	FN-F6
	FN-F4	FN-F4
Chembook	FN-F6	FN-F6
Commax	Ctrl-Alt-#6	Ctrl-Alt-#5
Compaq* **	Ctrl-Alt-<	Ctrl-Alt->
	FN-F4	FN-F4
	automatic	automatic
	mode/? (for setup option)	mode/? (for setup option)
Compuadd* **	automatic	automatic
	Alt-F for screen setup option	Alt-F for screen setup option
Data General	Ctrl-Alt-Command	Ctrl-Alt-Command
Data General Walkabout	2 CRT/X at DOS prompt	reboot
Datavue	Ctrl-Shift-M	Ctrl-Shift-M
DEC**	FN-F5	FN-F5
	FN-F4	FN-F4
Dell**	Ctrl-Alt-<	Ctrl-Alt->
	Ctrl-Alt-F10	Ctrl-Alt-F10
	FN-F8 (CRT/LCD)	FN-F8
	FN-D	FN-D
	FN-F12	FN-F12
Digital*	automatic	reboot
	FN-F2	FN-F2
Dolch	dip switch to CRT	dip switch to LCD
Epson	dip switch to CRT	dip switch to LCD
Everex*	setup screen option	setup screen option
For-A	Ctrl-Alt-Shift-C	Ctrl-Shift-Alt-L
Fujitsu	FN-F10	
Gateway	FN-F3 FN-F1/FN-F1 again simultaneous	FN-F3 FN-F1

Computer	Key command to activate port	Key command to de-activate port
Grid* **	FN-F2, choose auto or simultaneous	FN-F2
	Ctrl-Alt-Tab	Ctrl-Alt-Tab
Hitachi	FN-F7	FN-F7
Honeywell	FN-F10	FN-F10
Hyundai	setup screen option	setup screen option
IBM 970*	automatic	warm reboot
IBM ThinkPad**	reboot, enter setup menu	FN-F2
	FN-F7, select choice from setup menu	
	FN-F1, select choice	
	FN-F5, select choice	
	PS/2 SC select choice (CRT, LCD, etc.)	
Infotel	FN-F12	FN-F12
Kaypro	boot up, monitor plugged in	unplug monitor
Kris Tech	FN-F8	FN-F8
Leading Edge	FN-T	FN-T
Mac Portable 100	no video port: not compatible	
Mac PowerBook		
140, 145, 150, 170	no video port: requires a 3rd-party interface	
160, 165, 180, 520, 540, 5300	Control Panel folder, PowerBook Display folder; Activate Video Mirroring	warm reboot
210, 230, 250, 270, 280, 2300	requires Apple Docking Station or Mini Dock	
Magitronic	FN-F4	FN-F4
Mastersport	FN-F2	FN-F1
Micro Express*	automatic	warm reboot
Micron	FN-F2	FN-F2

Computer	Key command to activate port	Key command to de-activate port
Microslate*	automatic	warm reboot
Mitsubishi	SW2 On-Off-Off-Off	SW2 Off-On-On-On
NCR	setup screen option	setup screen option
NEC* **	setup screen option	setup screen option
	CRT at the DOS prompt	LCD at the DOS prompt
	FN-F3	FN-F3
Olivetti*	automatic	automatic
	FN-O/*	FN-O/*
Packard Bell* **	FN-F0	FN-F0
	Ctrl-Alt-<	Ctrl-Alt->
Panasonic	FN-F2	FN-F2
Prostar	Ctrl-Alt-S at bootup	Ctrl-Alt-S at bootup
Samsung*	setup screen option	setup screen option
Sanyo	setup screen option	setup screen option
Sharp	dip switch to CRT	dip switch to LCD
Sun SPARC-Dataview	Ctrl-Shift-M	Ctrl-Shift-M
Tandy**	Ctrl-Alt-Insert	Ctrl-Alt-Insert
	setup screen option	setup screen option
Tangent	FN-F5	FN-F5
Texas Instruments*	setup screen option	setup screen option
Top-Link* **	setup screen option	setup screen option
	FN-F6	FN-F6
Toshiba* **	Ctrl-Alt-End	Ctrl-Alt-Home
	FN-End	FN-Home
	FN-F5	FN-F5
	setup screen option	setup screen option
Twinhead*	FN-F7	FN-F7
	FN-F5	FN-F5
	Automatic	Automatic
WinBook	Ctrl-Alt-F10	Ctrl-Alt-F10
Wyse	software driven	software driven
Zenith**	FN-F10	FN-F10

Computer	Key command to activate port	Key command to de-activate port
	FN-F2	FN-F2
	FN-F1	FN-F1
Zeos**	Ctrl-Shift-D FN-F1	Ctrl-Shift-D FN-F1

* These manufacturers have models that automatically send video to the external CRT port when some type of display device is attached.

** These manufacturers offer more than one key command depending on the computer model.

Using Video Mirroring with a PowerBook Computer

When you turn video mirroring (called SimulScan in newer PowerBooks—see below) on, the projector displays the same information that appears on your PowerBook's built-in screen. When video mirroring is off, the projector acts like a separate display.

To turn on video mirroring for the first time:

1. Open the Monitors control panel; click on Monitor 2.
2. Set the number of colors you want.
3. Open the Control Strip, then click on the monitor icon.
4. Select "Turn Video Mirroring On."

Now you can turn video mirroring on and off from the Control Strip without having to open the Monitors control panel again.

When using video mirroring and high color graphics such as slide shows, the projected image occasionally might turn black and white. If this happens, perform the following steps:

1. Turn off video mirroring.
2. Open the Monitors control panel.
3. Move the white menu bar to Monitor 2 to set the projector as the primary monitor.
4. Restart the PowerBook.

Using SimulScan

Some newer PowerBooks display images on an external monitor or projector differently than previous ones. When using SimulScan, the projector displays the same information that appears on your PowerBook

To select SimulScan:

1. Open the Control Panel, then double-click Monitors and Sound.
2. In the Resolution list, choose the SimulScan mode, then click OK.
3. If this changes your display settings, a dialog box appears. Click OK to confirm the change.

Projected Image Size

Use the table to help you determine projected image sizes.

Table 1:
Range of distance to the screen for a given screen size

Diagonal Screen Size (inches)	Image Width (inches)	Distance to screen: Maximum distance (feet)	Distance to screen: Minimum Distance (feet)
34	27	4.6	4.1
40	32	5.7	4.6
70	56	10.5	8.2
100	80	15.2	11.8
200	160	30.6	23.8
236	189	36.1	28.2

NOTE: *Visit our website at www.infocus.com for an interactive image size calculator. It is located in the Technical Library in the Service and Support section.*

INDEX

Numerics

16 by 9 format 28

A

accessories, ordering 44, 45
activation commands for laptop computers 46
adjusting
- brightness 24
- color 24
- contrast 24
- height of projector 17
- image position 26
- image width 26
- keystone 25

adjusting the image 26
altitude limits 43
assistance. See Technical Support

B

Basic menu 24
BNC connection 12
brightness, adjusting 24

C

cables
- audio 9
- computer cable 2
- mouse 10
- ordering 44
- remote control 12
- video 11

Ceiling mounted projection 27
cleaning the projection lens 33
Color temperature 26
color, adjusting 24
colors
- don't match monitor colors 40
- not displayed 39

compatibility
- IBM-compatible 1
- Macintosh 1

computer cable 2, 9
computers
- compatible 1
- connecting 9

connecting
- BNC cables 12
- computer 9
- external speakers 12
- mouse 10
- power cord 13
- remote control cable 12
- video player 11–12

connecting RS-232 cable 10
connector panel
- audio out 12
- remote cable 12

contrast, adjusting 24

D

displaying on-screen menus 21
DPMS mode 27

E

Effect button 22
Effect menu 28
external speakers, connecting 12

F

Factory reset 29
focusing the image 17
Freeze 28

H

Hide OSD 27

I

IBM-compatible computers
- compatibility 1
- connecting 9

image
- adjusting 13, 17
- colors don't match computer's 40
- focusing 17
- freezing 28
- has lines or spots 40
- not centered 39
- not displayed 38
- out of focus 40
- quality 39–40
- resolution 1
- reversed 40
- size 7, 52
- too wide or too narrow 39
- zooming 17

K

keypad 21

keystone adjustment 22, 25

L

lamp
- ordering 44
- replacing 35
- turns off unexpectedly 40

lamp hour timer 29

Language menu 28

laptop computers
- activation sequence to allow secondary display 46
- compatibility 9
- connecting 9

LED 13, 21, 38

lens
- cap 44
- cleaning 33

LP790
- setting up 7
- specifications 43
- turning off 16
- turning on 13

M

Macintosh computers
- compatibility 1
- connecting 8

magnifying the image 22

maintenance 33

menus. See on-screen menus

monitor, projected colors don't match 40

mouse, connecting 10

Mute 28

O

on-screen menus
- displaying 23

P

Picture menu 26

position, adjusting 26

power cord
- connecting 13

power saving mode 27

power up sequence 15, 39

PS/2 mouse 10

R

Rear projection 27

remote control
- laser pointer 20
- replacing the batteries 37
- using 19, 21

replacing projection lamp module 35

Reset 25

resetting the lamp timer 29

resetting the projector 25, 29

resolution 1

RS-232 cable
- connecting 10

S
safety guidelines iii
security lock 37, 45
Service menu 29
Setup menu 25
Sharpness 26
shutting off the projector 16
SimulScan, using with PowerBooks 51
SourceSearch 27
specifications 43
starting up the projector 13
S-video, connecting 11
System menu 27

T
Technical Support
in Europe 4
in USA 4
information to have on hand before you call 41
temperature limits 43
text not visible 39
troubleshooting 38
Tune 26
turning off the projector 16
turning on the projector 13

U
USB mouse 10
User's logo menu 30

V
vertical lines displayed 40
video cable, connecting 11
video mirroring on a PowerBook 51

W
warranty 45
widescreen format 28

Z
zooming the image 17

LIMITED WARRANTY
ASK, InFocus, Proxima-Branded Products

InFocus Corporation ("InFocus") warrants that the ASK, InFocus, and Proxima-branded product ("Product") purchased from InFocus or an InFocus reseller will conform to the manufacturers specifications and be free from defects in material or workmanship for the Warranty period provided below. InFocus does not warrant that the Product will meet the specific requirements of the end-user customer. The Limited Warranty period commences on the date of purchase by the end-user customer. Said Limited Warranty shall apply only to the end-user purchaser (first person or entity that purchases a new Product for personal or business use and not for the purpose of distribution or resale). Any person exercising a claim under this Limited Warranty must establish to the satisfaction of InFocus both the date of purchase and that the Product was purchased new. The sales receipt or invoice, showing the date of purchase of the Product is the proof of the date of purchase.

From the date of such purchase, said Limited Warranty shall continue for a period of two (2) years (parts and labor) for Projector Products; for one (1) year (parts only) for customer replaceable and Accessory Products; and for ninety (90) days or 500 hours (parts only), whichever comes first, for Lamp Products (whether purchased in projectors or separately as replacements). During the Warranty period for the Product, Replacement lamps, which are purchased at the time of projector purchase, will have a 90-day or 500 hour Warranty, whichever comes first, from the date the spare lamp is put into use.

At the sole option of InFocus, the Product will either be repaired or replaced. All exchanged parts and Products replaced under this Warranty will become property of InFocus. InFocus' sole obligation is to supply (or pay for) all labor necessary to repair the Product found to be defective within the Warranty period and to repair or replace defective parts with new parts or, at the option of InFocus, serviceable used parts that are equivalent or superior to new parts performance.

During the Warranty period, to exercise this Limited Warranty, the purchaser must first contact either InFocus, a service facility authorized by InFocus or the place of original purchase. For Warranty service, the purchaser will be advised to return or deliver the defective Product freight and all fees prepaid, to an InFocus Service Center or to a service facility authorized by InFocus. When returning Product to InFocus, a Return Material Authorization Number (RMA #) is required and must be clearly displayed on the outside of the shipping carton containing the Product. The Product is to be fully insured and packed in either its original carton or a similar package affording an equal degree of protection. InFocus or the service facility authorized by InFocus will return the repaired/replaced Product freight prepaid to the purchaser. Products returned for Warranty service must be accompanied by a written letter that: i.) explains the problem; ii) provides proof of date of purchase; iii) provides the dealer's name; and iv.) provides the model and serial number of the Product. Upon request of InFocus Corporation or an authorized repair center for InFocus, proof of legal importation must accompany the warranty repair Product, otherwise the Product must be returned to the place of original purchase, to the manufacturer (Purchaser must bear all tax, duty and freight), or the Purchaser must bear charges for the warranty repair.

No repair or replacement of Product or part thereof shall extend the Warranty period as to the entire Product. Warranty on the repaired part and workmanship shall only be effective for a period of ninety (90) days following the repair or replacement of that part or the remaining period of the Product Warranty whichever is greater.

WARRANTY LIMITATION AND EXCLUSION

This Limited Warranty extends only to Products purchased from InFocus or an InFocus authorized reseller. InFocus shall have no further obligation under the foregoing Limited Warranty if the Product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, lack of proper ventilation or exposure to smoke, unauthorized modifications, tampering, alterations, or service other than by InFocus or its authorized agents, causes other than from ordinary use or failure to properly use the Product in the application for which said Product is intended.

Limited Warranty excludes Product or accessory cleaning, repair, or replacement of plastics due to cosmetic damage and damage as a result of normal wear. Product repair outside of the terms of the Limited Warranty will be on a time and materials basis. Prolonged Product "demonstration" causes unusual Product wear and is not considered normal use under the terms of this Limited Warranty.

Accessory Warranty covers the accessory item only and excludes normal wear. Lamp Product Warranty excludes expected lamp degradation.

Remanufactured Products and Software Products are exempt from the foregoing Limited Warranty. Please refer to the appropriate Remanufactured Product Limited Warranty or Software Product Limited Warranty for applicable Warranty information.

DISCLAIMER OF UNSTATED WARRANTIES

THE WARRANTY PRINTED ABOVE IS THE ONLY WARRANTY APPLICABLE TO THIS PURCHASE. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE FACE HEREOF AND THE FOREGOING WARRANTY SHALL NOT BE EXTENDED, ALTERED OR VARIED EXCEPT BY WRITTEN INSTRUMENT SIGNED BY INFOCUS. SOME JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY MAY LAST, SO SUCH LIMITATIONS MAY NOT APPLY TO YOU.

LIMITATION OF LIABILITY

IT IS UNDERSTOOD AND AGREED THAT INFOCUS' LIABILITY WHETHER IN CONTRACT, IN TORT, UNDER ANY WARRANTY, IN NEGLIGENCE OR OTHERWISE SHALL NOT EXCEED THE RETURN OF THE AMOUNT OF THE PURCHASE PRICE PAID BY PURCHASER AND UNDER NO CIRCUMSTANCES SHALL INFOCUS BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS, LOST REVENUES OR LOST SAVINGS. THE PRICE STATED FOR THE PRODUCT IS A CONSIDERATION IN LIMITING INFOCUS' LIABILITY. NO ACTION, REGARDLESS OF FORM, ARISING OUT OF THE AGREEMENT TO PURCHASE THE PRODUCT MAY BE BROUGHT BY PURCHASER MORE THAN ONE YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, DEPENDING ON JURISDICTION.